

REMARKS/ARGUMENT

Support for the amendment to Claim 10 is found at specification page 3, lines 7-9.

Support for new Claim 19 is found at specification page 4, line 20. Support for new Claim 20 is found at specification page 4, lines 28-29. Support for new Claims 21-23 is found at specification page 4, lines 31-32 and at specification page 5, lines 31-32. New Claim 24 is supported at specification page 1, line 11. New Claim 25 finds support in original Claim 9 and at specification page 6, lines 11-14. Finally, new Claims 26 and 27 are supported at specification page 5, lines 33-35 and at specification page 6, line 28. No new matter has been entered.

The above amendments to the claims limit the claimed polymer to those allowed in EP 1,588,667, attached. These claims were allowed over the Schubert references applied herein, all listed as “X” references on the International Search Report. The reason that the pending claims, as amended, are allowable is that they have now been limited to those where the number average molecular weight of the polymer is at least 200,000.

While the Schubert references disclose polymers of the same general type or structure as those now claimed they are obtained by bridging bis-functionalized ethylene oxide oligomers with nickel, iron, cobalt or zinc cations. The bis-functionalized ethylene oxide oligomers have molecular weights of approximately 8,000 or 3,300 g/mol. While polymers can be obtained from such oligomers via addition of transition metal ions, the Schubert references do not disclose a resultant molecular weight for the reference polymers. Even if the degree of polymerization n were 10 for such oligomers, the resulting molecular weight of the polymer would only be 80,000 as compared with at least 200,000 for those polymers presently claimed. Thus, the references do not anticipate Applicants’ claims.

Moreover, and with regard to any question of obviousness, the Schubert references do not enable the preparation of polymers as claimed having a number average molecular weight of at least 200,000. In this regard, the present inventors have discovered that such high

molecular weight polymers can be prepared by the rapid addition of the metal salt to a solution of the polymer precursor without metal salt. See specification page 3, lines 19-21.

In contrast, in Schubert the metal salt solution is added dropwise to a solution of unbridged units. See, e.g., the last paragraph of the left hand column at page 395 of Schubert reference AV, column 2, second full paragraph at page 542 of Schubert reference AW, and the bottom portion of the right hand column of page 1157 of Schubert reference AX. While the slow addition of the metal salt according to Schubert provides intramolecular complexing of the units, in the present invention the metal salt solution is added quickly, or the solution and the metal salt are mixed and reacted directly with one another, as explained at specification page 3, lines 31-34, leading to the high molecular weight products claimed which have superior thickening properties as compared to the lower molecular weight materials of Schubert.

Because Schubert does not disclose Applicants' high molecular weight polymers nor enable their production,¹ the rejections should be reconsidered and withdrawn. In addition, All claims pending herein have been amended to depend, ultimately, on an allowable polymer claim and are thus themselves allowable. Thus, they should be included with the allowed claims.

¹ In order to form the basis of an obviousness rejection a reference must provide an enabling disclosure. See MPEP 2121.02.

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Accordingly, and in view of the above amendments to the claims and accompanying remarks, Applicants respectfully request the reconsideration and withdrawal of the outstanding rejections, and the passage of this case to Issue.

Respectfully submitted,

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